



**National Voluntary
Laboratory Accreditation Program**



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Oklahoma Bureau of Standards

2800 North Lincoln Boulevard
Oklahoma City, OK 73105-4298

Mr. Ken Fraley

Phone: 405-522-5459 Fax: 405-522-5461

E-mail: ken.fraley@oda.state.ok.us

URL: <http://www.state.ok.us/lab-boshome.htm>

CALIBRATION LABORATORIES

NVLAP LAB CODE 200396-0

Scope Revised: 2006-04-04

NVLAP Code: 20/A01

ANSI/NCSL Z540-1-1994; Part 1

Compliant

DIMENSIONAL

NVLAP Code: 20/D13

Surveying Rods and Tapes

<i>Range in inches</i>	<i>Best Uncertainty (±) in inches^{note 1}</i>	<i>Remarks</i>
0 to 1	0.0033	Rigid Rules
0 to 2	0.0033	Rigid Rules
0 to 3	0.0033	Rigid Rules
0 to 4	0.0033	Rigid Rules
0 to 5	0.0033	Rigid Rules
0 to 6	0.0033	Rigid Rules
0 to 7	0.0033	Rigid Rules
0 to 8	0.0033	Rigid Rules
0 to 9	0.0033	Rigid Rules
0 to 10	0.0033	Rigid Rules
0 to 11	0.0033	Rigid Rules
0 to 12	0.0033	Rigid Rules
0 to 24	0.0048	Rigid Rules
0 to 36	0.0065	Rigid Rules
0 to 48	0.0084	Rigid Rules

2006-01-01 through 2006-12-31

Effective dates

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<i>Range in feet</i>	<i>Best Uncertainty (±) in inches ^{note 1}</i>	<i>Remarks</i>
0 to 1	0.0045	Tapes – Bench Method
0 to 2	0.0050	Tapes – Bench Method
0 to 3	0.0045	Tapes – Bench Method
0 to 4	0.0046	Tapes – Bench Method
0 to 5	0.0045	Tapes – Bench Method
0 to 6	0.0049	Tapes – Bench Method
0 to 7	0.0045	Tapes – Bench Method
0 to 8	0.0045	Tapes – Bench Method
0 to 9	0.0045	Tapes – Bench Method
0 to 10	0.0051	Tapes – Bench Method
0 to 20	0.0094	Tapes – Bench Method
0 to 30	0.014	Tapes – Bench Method
0 to 40	0.018	Tapes – Bench Method
0 to 50	0.022	Tapes – Bench Method
0 to 60	0.027	Tapes – Bench Method
0 to 70	0.031	Tapes – Bench Method
0 to 80	0.035	Tapes – Bench Method
0 to 90	0.040	Tapes – Bench Method
0 to 100	0.044	Tapes – Bench Method
0 to 110	0.048	Tapes – Bench Method
0 to 120	0.052	Tapes – Bench Method
0 to 130	0.057	Tapes – Bench Method
0 to 140	0.061	Tapes – Bench Method
0 to 150	0.065	Tapes – Bench Method
> 150	0.065 ^{note 2}	Tapes – Bench Method

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MECHANICAL

NVLAP Code: 20/M08
Mass - Metric

<i>Range</i>	<i>Best Uncertainty (\pm)^{note 1}</i>	<i>Remarks</i>
30 kg	10 mg	Echelon I
20 kg	7.8 mg	Echelon I
10 kg	0.83 mg	Echelon I
5 kg	0.55 mg	Echelon I
3 kg	0.40 mg	Echelon I
2 kg	0.46 mg	Echelon I
1 kg	58 μ g	Echelon I
500 g	29 μ g	Echelon I
300 g	19 μ g	Echelon I
200 g	13 μ g	Echelon I
100 g	11 μ g	Echelon I
50 g	6.3 μ g	Echelon I
30 g	4.5 μ g	Echelon I
20 g	3.7 μ g	Echelon I
10 g	3.9 μ g	Echelon I
5 g	2.9 μ g	Echelon I
3 g	2.4 μ g	Echelon I
2 g	2.2 μ g	Echelon I
1 g	2.6 μ g	Echelon I
500 mg	1.4 μ g	Echelon I
300 mg	0.88 μ g	Echelon I
200 mg	0.67 μ g	Echelon I
100 mg	0.59 μ g	Echelon I
50 mg	0.31 μ g	Echelon I
30 mg	0.20 μ g	Echelon I
20 mg	0.15 μ g	Echelon I
10 mg	0.14 μ g	Echelon I
5 mg	0.10 μ g	Echelon I
3 mg	0.10 μ g	Echelon I

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CALIBRATION LABORATORIES

NVLAP LAB CODE 200396-0

Scope Revised: 2006-04-04

2 mg	0.08 µg	Echelon I
1 mg	0.10 µg	Echelon I
1200 kg	10 g	Echelon II
750 kg	10 g	Echelon II
500 kg	1.1 g	Echelon II
250 kg	1.1 g	Echelon II
200 kg	0.41 g	Echelon II
100 kg	0.41 g	Echelon II
50 kg	24 mg	Echelon II
30 kg	10 mg	Echelon II
20 kg	9.3 mg	Echelon II
10 kg	2.3 mg	Echelon II
5 kg	1.3 mg	Echelon II
3 kg	1.0 mg	Echelon II
2 kg	0.93 mg	Echelon II
1 kg	78 µg	Echelon II
500 g	56 µg	Echelon II
300 g	48 µg	Echelon II
200 g	45 µg	Echelon II
100 g	18 µg	Echelon II
50 g	15 µg	Echelon II
30 g	12 µg	Echelon II
20 g	10 µg	Echelon II
10 g	6.4 µg	Echelon II
5 g	4.5 µg	Echelon II
3 g	3.7 µg	Echelon II
2 g	3.4 µg	Echelon II
1 g	1.5 µg	Echelon II
500 mg	1.5 µg	Echelon II
300 mg	1.1 µg	Echelon II
200 mg	1.0 µg	Echelon II
100 mg	0.89 µg	Echelon II
50 mg	0.62 µg	Echelon II
30 mg	0.38 µg	Echelon II

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20 mg	0.36 µg	Echelon II
10 mg	0.38 µg	Echelon II
5 mg	0.32 µg	Echelon II
3 mg	0.33 µg	Echelon II
2 mg	0.32 µg	Echelon II
1 mg	0.34 µg	Echelon II

Mass - Avoirdupois

Range	Best Uncertainty (±) in µlb ^{note 1}	Remarks
2500 lb	25	Echelon II
2000 lb	25	Echelon II
1000 lb	3.1	Echelon II
500 lb	0.74	Echelon II
300 lb	0.72	Echelon II
200 lb	0.71	Echelon II
100 lb	0.064	Echelon II
50 lb	0.022	Echelon II
25 lb	0.0067	Echelon II
20 lb	0.0046	Echelon II
10 lb	0.0024	Echelon II
5 lb	0.0021	Echelon II
3 lb	0.0014	Echelon II
2 lb	0.00021	Echelon II
1 lb	0.00016	Echelon II
0.5 lb	0.00011	Echelon II
0.3 lb	0.00011	Echelon II
0.2 lb	0.000068	Echelon II
0.1 lb	0.000047	Echelon II
0.05 lb	0.000030	Echelon II
0.03 lb	0.000031	Echelon II
0.02 lb	0.000020	Echelon II
0.01 lb	0.000014	Echelon II
0.005 lb	0.000011	Echelon II
0.003 lb	0.0000076	Echelon II
0.002 lb	0.0000079	Echelon II

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0.001 lb	0.0000062	Echelon II
0.0005 lb	0.0000032	Echelon II
0.0003 lb	0.0000033	Echelon II
0.0002 lb	0.0000029	Echelon II
0.0001 lb	0.0000017	Echelon II
0.00005 lb	0.0000011	Echelon II
0.00003 lb	0.0000017	Echelon II
0.00002 lb	0.0000015	Echelon II
0.00001 lb	0.0000007	Echelon II
0.000005 lb	0.0000007	Echelon II
0.000003 lb	0.0000008	Echelon II
0.000002 lb	0.0000008	Echelon II
0.000001 lb	0.0000008	Echelon II

Mass - Metric

Range	Best Uncertainty (\pm) ^{note 1}	Remarks
1200 kg	28 g	Echelon III
1000 kg	24 g	Echelon III
750 kg	13 g	Echelon III
500 kg	4.4 g	Echelon III
250 kg	5.1 g	Echelon III
200 kg	4.7 g	Echelon III
100 kg	1.8 g	Echelon III
50 kg	1.3 g	Echelon III
30 kg	0.16 g	Echelon III
25 kg	0.15 g	Echelon III
20 kg	0.15 g	Echelon III
10 kg	0.14 g	Echelon III
5 kg	11 mg	Echelon III
3 kg	7.6 mg	Echelon III
2 kg	6.8 mg	Echelon III
1 kg	6.1 mg	Echelon III
500 g	6.0 mg	Echelon III
300 g	3.8 mg	Echelon III
200 g	1.4 mg	Echelon III

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100 g	0.61 mg	Echelon III
50 g	0.35 mg	Echelon III
30 g	0.32 mg	Echelon III
20 g	0.32 mg	Echelon III
10 g	0.13 mg	Echelon III
5 g	0.13 mg	Echelon III
3 g	0.12 mg	Echelon III
2 g	0.12 mg	Echelon III
1 g	0.11 mg	Echelon III
500 mg	0.11 mg	Echelon III
300 mg	0.11 mg	Echelon III
200 mg	70 µg	Echelon III
100 mg	62 µg	Echelon III
50 mg	42 µg	Echelon III
30 mg	42 µg	Echelon III
20 mg	42 µg	Echelon III
10 mg	41 µg	Echelon III
5 mg	32 µg	Echelon III
3 mg	32 µg	Echelon III
2 mg	32 µg	Echelon III
1 mg	31 µg	Echelon III

Mass – Avoirdupois

Range	Best Uncertainty (±) in µlb ^{note 1}	Remarks
2500 lb	30	Echelon III
2000 lb	28	Echelon III
1500 lb	27	Echelon III
1250 lb	26	Echelon III
1000 lb	9.2	Echelon III
500 kb	6.3	Echelon III
300 lb	5.2	Echelon III
250 lb	4.0	Echelon III
200 lb	4.0	Echelon III
125 lb	3.3	Echelon III
100 lb	0.51	Echelon III

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50 lb	0.31	Echelon III
30 lb	0.31	Echelon III
25 lb	0.31	Echelon III
20 lb	0.31	Echelon III
15 lb	0.31	Echelon III
10 lb	0.014	Echelon III
5 lb	0.014	Echelon III
4 lb	0.015	Echelon III
3 lb	0.013	Echelon III
2 lb	0.013	Echelon III
1 lb	0.0083	Echelon III
0.5 lb	0.0083	Echelon III
0.3 lb	0.00090	Echelon III
0.2 lb	0.00060	Echelon III
0.1 lb	0.00039	Echelon III
0.05 lb	0.00030	Echelon III
0.03 lb	0.00028	Echelon III
0.02 lb	0.00025	Echelon III
0.01 lb	0.00024	Echelon III
0.005 lb	0.00024	Echelon III
0.003 lb	0.00024	Echelon III
0.002 lb	0.00024	Echelon III
0.001 lb	0.00024	Echelon III

NVLAP Code: 20/M12
Volume

Range	Best Uncertainty (\pm) ^{note 1}	Remarks
375 gal	13 in ³	Volume Transfer
300 gal	11 in ³	Volume Transfer
250 gal	9.1 in ³	Volume Transfer
200 gal	7.3 in ³	Volume Transfer
150 gal	5.6 in ³	Volume Transfer
100 gal	3.6 in ³	Volume Transfer
50 gal	1.9 in ³	Volume Transfer

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30 gal	1.0 in ³	Volume Transfer
25 gal	0.9 in ³	Volume Transfer
20 gal	0.43 in ³	Volume Transfer
15 gal	0.37 in ³	Volume Transfer
10 gal	0.21 in ³	Volume Transfer
5 gal	0.18 in ³	Volume Transfer
25 gal	0.85 in ³	Gravimetric Method
5 gal	0.056 in ³	Gravimetric Method
1 gal	0.030 in ³	Gravimetric Method
0.5 gal	0.027 in ³	Gravimetric Method
1 qt	0.027 in ³	Gravimetric Method
1 pt	0.015 in ³	Gravimetric Method
0.5 pt	0.0070 in ³	Gravimetric Method
1 gill	0.0071 in ³	Gravimetric Method
2 fl oz	0.0014 in ³	Gravimetric Method
1 fl oz	0.0014 in ³	Gravimetric Method

1. Represents an expanded uncertainty using a coverage factor, $k = 2$, at an approximate level of confidence of 95 %.
2. Tapes greater than 150 feet uncertainty equals 0.0632 + 0.00426 inches per 10 foot interval.

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